

We claim:

1. An eyewear device comprising a frame, lenses on the frame, and a filter disposed between the lenses and a user's face for filtering air in an air volume in the eyewear.
2. The device of claim 1, wherein the filter is an electrostatic filter.
3. The device of claim 1, wherein the filter enables heat transfer for transferring heat into an airflow from thermal heat of the wearer's face.
4. The device of claim 1, wherein the filter is selected from a group consisting of screens, wires, fibers, open cell foams, and combinations thereof.
5. The device of claim 1, further comprising a channel disposed adjacent to the filter.
6. The device of claim 5, wherein the channel is selected from the group consisting of baffles, fins, honeycombs, molded parts, and combinations thereof.
7. The device of claim 1, wherein the electrostatic filter is selected from a group consisting of baffles, fins, parallel planes, sheets, tube bundles, corrugated sheets, honeycombs, molded parts, corona discharge points, charged plates, charged wires, and combinations thereof.
8. The device of claim 2, where the electrostatic filter is an electret.
9. The device of claim 8, wherein the electret is selected from the group consisting of plastic, polypropylene, polycarbonate, FEP TEFLON, polylvinidene fluoride, PVF<sub>2</sub>, and combinations thereof.
10. The device of claim 1, further comprising baffles disposed adjacent to the filters.

11. The device of claim 10, wherein the baffles comprise heat transfer enhancers.
12. The device of claim 11, wherein the enhancers are selected from the group consisting of surface coatings, fillers, tapers, fins, convolutions, grooves, bumps, and combinations thereof.
13. The device of claim 11, wherein the enhancers are selected from a group consisting of  $\text{Al}_2\text{O}_3$ , SiC, MgO,  $\text{SnO}_2$ , Mg, graphite, Al, high emissivity coatings, carbon black coatings, and combinations thereof.
14. The device of claim 2, further comprising an insert for receiving the filter.
15. The device of claim 14, wherein the insert is selected from the group consisting of non-electrostatic filters, screens, wires, fibers, open cell foams, baffles, honeycombs, and combinations thereof.
16. The device of claim 17, wherein the filter is replaceable and removably disposed on the frame of the eyewear.
17. The device of claim 1, further comprising a module for the filter.
18. The device of claim 16, wherein the module is replaceable and removably disposed on the frame of the eyewear.
19. The device of claim 18, wherein the module is of material selected from a group consisting of molded plastic, metal, rubber, and combinations thereof.
20. The device of claim 19, wherein the filter is removably incorporated in the module.

21. The device of claim 1, where the lenses comprise interior-facing portions and exterior-facing portions, wherein the interior-facing portions have higher thermal conductivity and extensive contact areas with air than the exterior-facing portions.

22. The device of claim 1, wherein the frame comprises an exterior having low thermal conductivity.

23. The device of claim 22, wherein the exterior comprises low thermal conductivity materials.

24. The device of claim 22, wherein the exterior comprises voids, bubbles, gas bubbles, and combinations thereof.

25. The device of claim 22, wherein the exterior comprises a surface layer.

26. The device of claim 25, wherein the surface layer is a low thermal conductivity layer.

27. The device of claim 22, wherein the frame comprises an interior having high thermal conductivity.

28. The device of claim 27, wherein the interior comprises high thermal conductive metal particles.

29. The device of claim 27, wherein the interior comprises high thermal conductivity fibers.

30. The device of claim 27, wherein the interior comprises high thermal conductivity particles incorporated therein.

31. The device of claim 27, wherein the interior comprises high thermal conductivity flakes.

32. The device of claim 27, wherein the frame is of plastic material.

- 33. The device of claim 27, wherein the frame is a rubber molded frame.
- 34. The device of claim 1, further comprising a low thermal conductivity layer on the eyewear.
- 35. The device of claim 34, wherein the layer comprises gas bubbles.
- 36. The device of claim 35, wherein the bubbles are selected from the group consisting of air, argon, nitrogen, SF<sub>6</sub>, glass micro-balloons, and combinations thereof.
- 37. The device of claim 34, wherein the layer is a surface layer on the frame.
- 38. The device of claim 34, wherein the layer is of material with low thermal conductivity.
- 39. The device of claim 34, wherein the layer is disposed on an exterior of the frame.
- 40. The device of claim 34, further comprising a high thermal conductivity layer on the eyewear.
- 41. The device of claim 40, wherein the layer comprises metal particles.
- 42. The device of claim 41, wherein the metal particles are selected from a group consisting of Al<sub>2</sub>O<sub>3</sub>, SiC, MgO, SnO<sub>2</sub>, Mg, Al, graphite, and combinations thereof.
- 43. The device of claim 41, wherein the layer comprises high thermal conductivity fibers.
- 44. The device of claim 43, wherein the fibers are selected from the group consisting of SiC, Al, Mg, C, and combinations thereof.
- 45. The device of claim 27, wherein the layer is of plastic material.
- 46. The device of claim 27, wherein the layer is of molded rubber.

47. The device of claim 1, wherein the eyewear comprises heat transfer portions in thermal contact with the user's face for transferring heat into an air flow from the face, and wherein an interior facing portion has high thermal conductivity and an exterior facing portion has a low thermal conductivity.

48. The device of claim 47, wherein the portions are disposed on areas of the eyewear selected from the group consisting of the frame, the lenses, the filter, and combinations thereof.

49. A dust-proof non-fogging eyewear comprising a frame, lenses on the frame, and a filter gasket disposed between a user's face and lenses for electrostatically filtering air flow of particulate but permitting a gentle flow of air to maintain comfort to a user and preventing fogging on the lenses.

50. The eyewear of claim 49, wherein the filter comprises electret filter material forming a perimeter around a user's eyes and the lenses for removing particulates from the air flow.

51. The eyewear of claim 50, further comprising inserts for the filter.

52. The eyewear of claim 51, wherein the inserts are removable and replaceable.

53. The eyewear of claim 52, wherein the inserts are selected from the group consisting of face contact gaskets, baffles, coarse filters, electret filters, and combinations thereof.